

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International publication date
29 April 2004 (29.04.2004)

PCT

(10) International publication number
WO 2004/036134 A1

- (51) International patent classification⁷: F28D 9/00
- (21) International application number: PCT/EP2003/009675
- (22) International filing date: 1 September 2003 (01.09.2003)
- (25) Language of filing: German
- (26) Language of publication: German
- (30) Data relating to the priority:
102 47 264.5 10 October 2002 (10.10.2002) DE
- (71) Applicant (for all designated States except US): BEHR GMBH & CO. [DE/DE]; Mauserstrasse 3, 70469 Stuttgart (DE).
- (72) Inventors; and
- (75) Inventors/Applicants (US only): EMRICH, Karsten [DE/DE]; Gutenbergstrasse 97, 70197 Stuttgart (DE).

HENDRIX, Daniel [DE/DE]; Remstalstrasse 31, 70374 Stuttgart (DE). KOPP, Joachim [DE/DE]; Feuerbacher Weg 13, 70192 Stuttgart (DE). KRAMER, Wolfgang [DE/DE]; Teckstrasse 40/1, 71384 Weinstadt (DE). MOLDOVAN, Florian [DE/DE]; Kornbergstrasse 28A, 70176 Stuttgart (DE). RICHTER, Jens [DE/DE]; Walter-Flex-Strasse 24, 71640 Ludwigsburg (DE).

(74) Joint Representative: BEHR GMBH & CO.; Mauserstrasse 3, 70469 Stuttgart (DE).

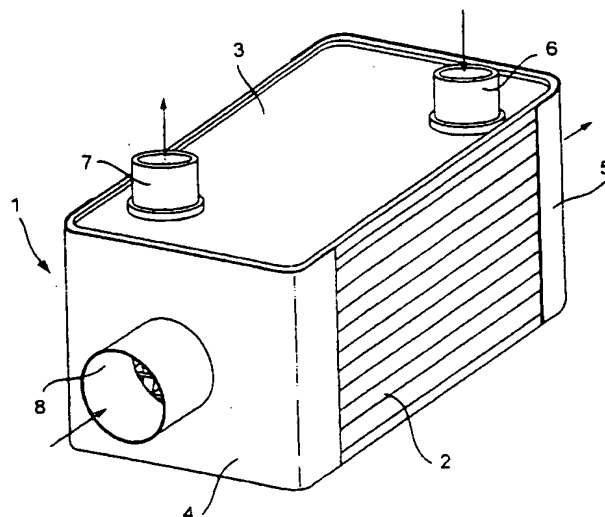
(81) Designated states (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.

[continued on next page]

As printed

(54) Title: STACKED PLATE HEAT EXCHANGER

(54) Bezeichnung: PLATTENWÄRMEÜBERTRAGER IN STAPELBAUWEISE



(57) Abstract: A plate heat exchanger comprising a plurality of plates (12,13) which are stacked against each other and which are of a first and second type in order to form flow channels for a first and second medium. The plates form a heat exchanger block (2) with an upper side and a lower side and with two opposite side surfaces (10) and front faces (9). The first flow channels are peripherally sealed for the first medium and are fluidically connected to distributor and collector channels which are arranged in a vertical position with respect to the plate plane and which lead into inlet and outlet connection pieces (6,7) which are respectively arranged on the upper side and/or lower side (3,11). The second flow channels are open at the front surfaces (9) thereof and are sealed at the side surfaces (10) thereof. The open sides (9) form an inlet and outlet plane for the second medium.

[continued on next page]

WO 2004/036134 A1